

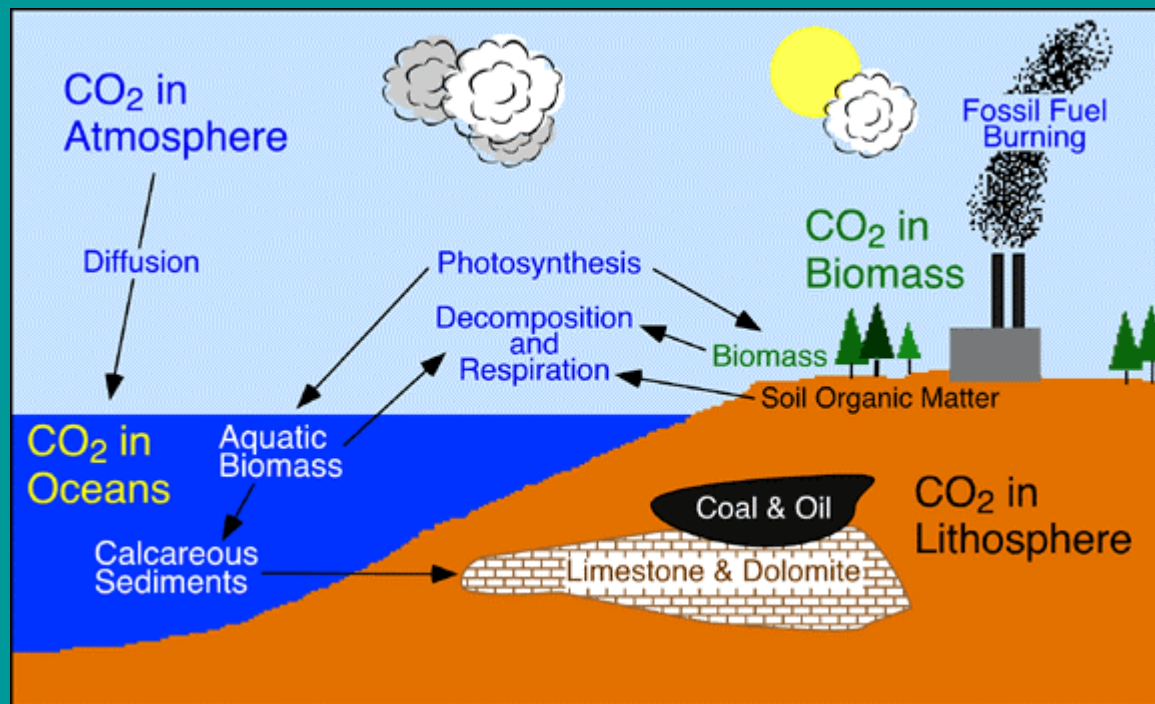
# California Forests and Climate Change

## SB 812 Forest Protocols

### Introduction

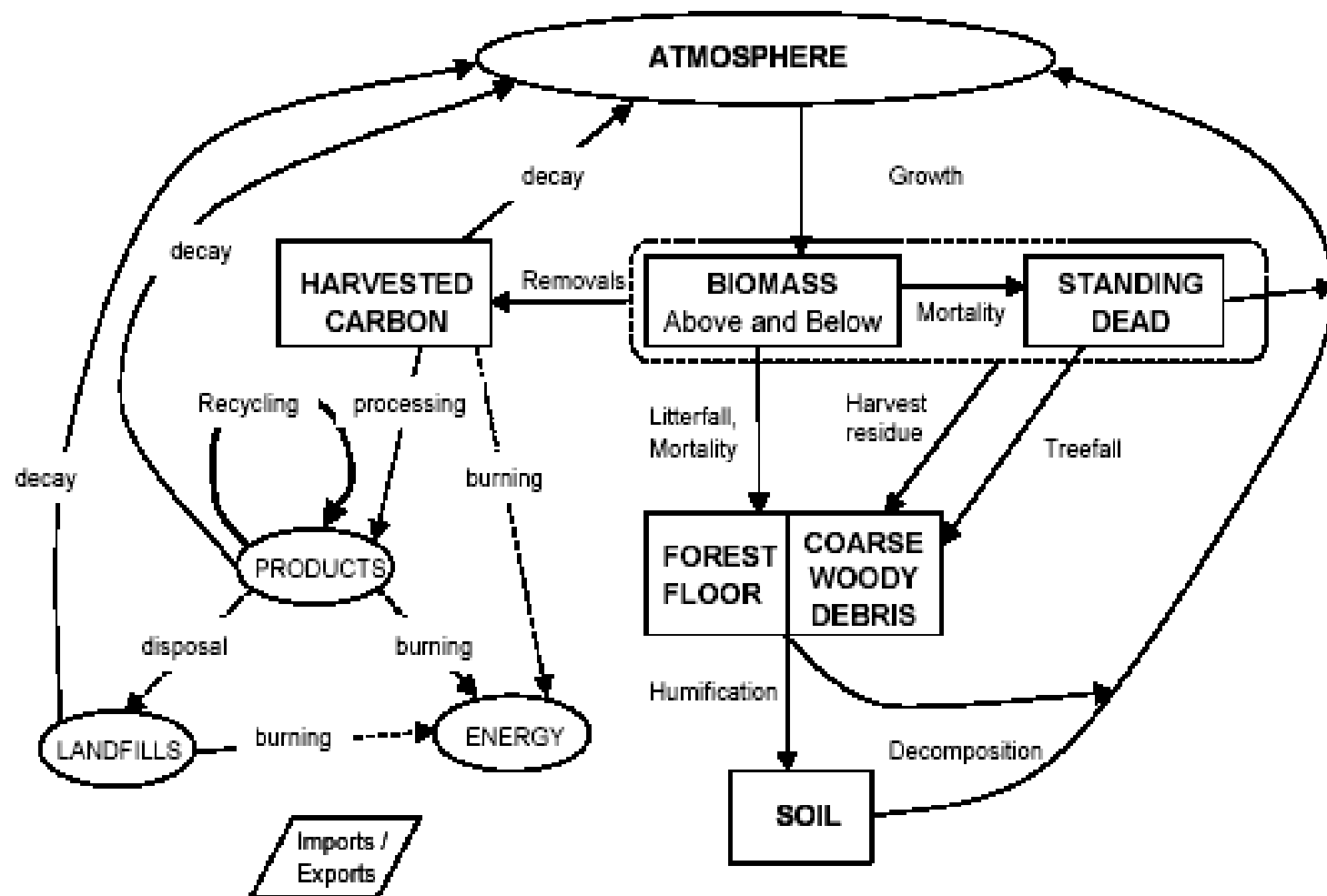
Andrea Tuttle, Director Calif. Dept. Forestry and Fire Prot.  
May 27, 2004

## General Role of Forest in the Carbon Cycle



# Life Cycle for Biologic Forest Carbon

Figure 7. Forest sector carbon flows



Source: Birdsey and Lewis, 2001

# The predicted impacts of Global Warming of most concern to California include:

- Reduced summer runoff of fresh water
- Increased winter rains intensify flooding and landslides
- Reduced coastal fog
- Longer, hotter summers
- Invasive species out compete natives for critical resources
- Climate changes increase the number of endangered species
- Pest species become more prominent or destructive
- Longer dry periods will decrease forest fuel moisture
- Fisheries negatively impacted
- Cycles of beach and cliff erosion from wave damage



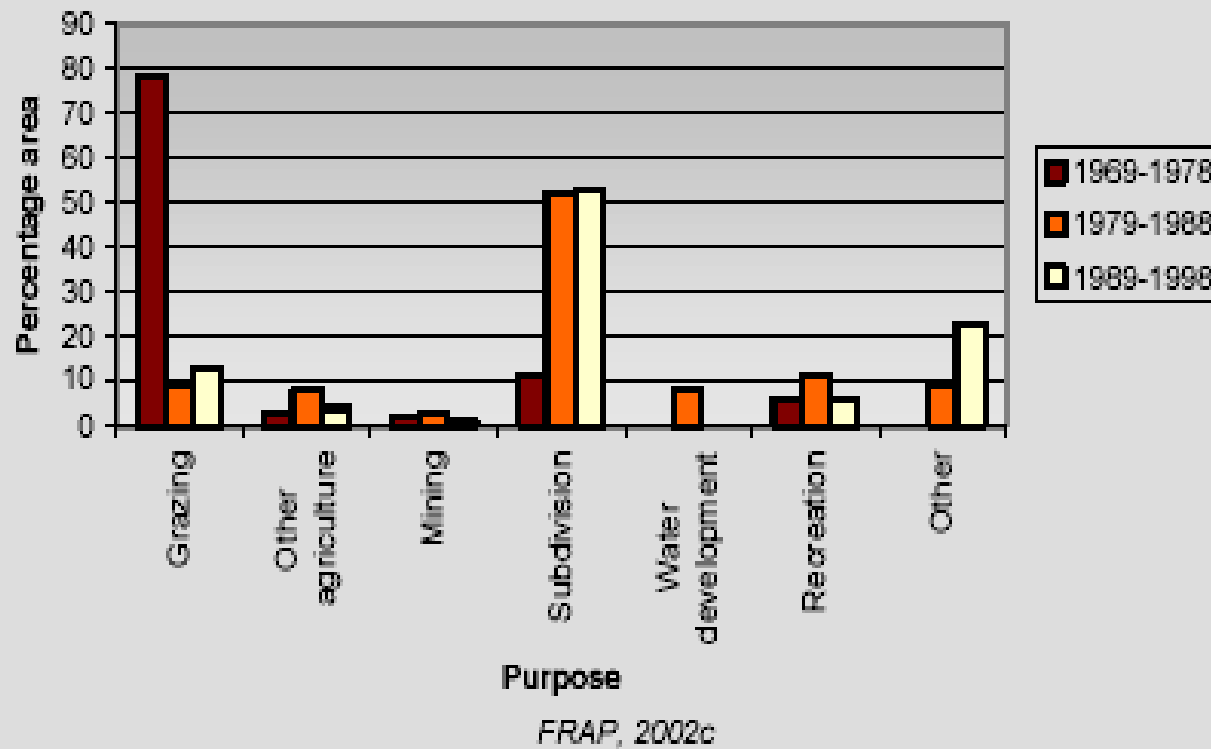
# San Bernardino County Lake Arrowhead



Failure to Manage Forests Results in Carbon Emissions and Public Risk

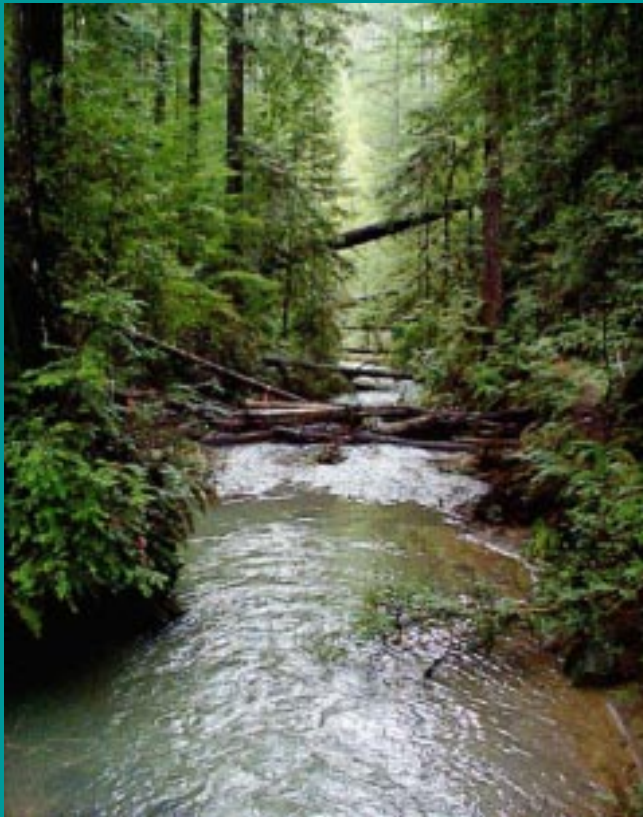
## Forest Lands are being Converted to Non-Forest Uses

Figure 21. Percentage area of change by purpose of timberland conversions, 1969-1998





# CHARISMATIC CARBON



Imagine an insert in your airline ticket that says, "gYou GHG emissions are being offset by protecting forests and salmon in California" h